

Date: Tue, 6 Sep 94 04:30:24 PDT  
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>  
Errors-To: Ham-Homebrew-Errors@UCSD.Edu  
Reply-To: Ham-Homebrew@UCSD.Edu  
Precedence: Bulk  
Subject: Ham-Homebrew Digest V94 #265  
To: Ham-Homebrew

Ham-Homebrew Digest                      Tue, 6 Sep 94                      Volume 94 : Issue 265

Today's Topics:

                    10 meter amp?  
            Amplifier with GS35 Triode  
            MIC Cable source???  
    More on Receivers that Radiate  
            Pocket SW Receiver Design  
            RFI Free PC Computer Cabinet?  
            TS-450S CB Operating  
    Unitrode 1N5767 PIN diode + TR switch design  
            WANTED:radio plans

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>  
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: Mon, 5 Sep 1994 16:56:05 GMT  
From: news.sprintlink.net!crash!nctams1!pnet16!n921w1@uunet.uu.net  
Subject: 10 meter amp?  
To: ham-homebrew@ucsd.edu

Robert: You may try checking the bias voltage after the amp heats up. Sounds  
like it changes after heating up the transistors, also hows the thermo  
prection ckt?  
Chuck AH6IN Aloha

INET: n921w1@pnet16.navy.mil  
  
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Date: Mon, 5 Sep 94 10:07:03 GMT  
From: ihnp4.ucsd.edu!swrinde!pipex!bt!uknet!uos-ee!ee.surrey.ac.uk!  
M.Willis@network.ucsd.edu  
Subject: Amplifier with GS35 Triode  
To: ham-homebrew@ucsd.edu

I am looking for a design using the Russian gs35 Triode on 432 MHz. This valve has an anode dissipation of 1500W and is usable up to 1 GHz. It seems ideal for QRO work at 70cms. What I do not have is a tried and tested design for it. I can make a first attempt using a modification of an existing design for another valve but, I am sure a lot of optimisation would be necessary. As I have only got two valves, I do not want to do any destructive testing. I have some limited valve data, including capacitance and operating parameters, but nothing on cooling requirements or gain and stability expectations.

Mike

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Date: 6 Sep 94 02:51:15 EDT  
From: ihnp4.ucsd.edu!library.ucla.edu!europa.eng.gtefsd.com!  
newsxfer.itd.umich.edu!gumby!wmichgw!x90galbraith1@network.ucsd.edu  
Subject: MIC Cable source???  
To: ham-homebrew@ucsd.edu

Greetings,  
Anyone know where I could purchase 50 feet or less of Mic cable-2 conductor + ground/shield?  
Mouser and Digikey only ship in 100 or 500' lengths.  
Tks+73,  
Chris, KA8WFC

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Date: 5 Sep 1994 10:53:51 GMT  
From: ihnp4.ucsd.edu!swrinde!gatech!newsxfer.itd.umich.edu!zip.eecs.umich.edu!  
dip.eecs.umich.edu!chrismc@network.ucsd.edu  
Subject: More on Receivers that Radiate  
To: ham-homebrew@ucsd.edu

In article <1994Sep2.021107.12466@egreen.wednet.edu>,  
John Mollan - Harm <jmollan@egreen.iclnet.org> wrote:  
>In article <9407307782.AA778263641@mails.imed.com>,  
>Mack Ray <mack@mails.imed.COM> wrote:  
>> David Newkirk's post in digest #258 prompted this post. I have first  
>> hand experience with the receiver radiation problem he described. I

...  
>> This should make it obvious why they do not want you to use a portable  
>> FM radio in an aircraft where the LO can easily be in the aircraft  
>> band.

...  
>> My experience with cheap boom box type radios and small portable  
>> radios has been consistent. They make incredibly good transmitters!

>Back in the days of WW II the German U-boat crews would tune receivers to  
>Allied radar frequencies to see if there were any planes or ships near. The  
>Allies retaliated by turning their radar off and listening for the  
>oscillators in the U-boats' receivers. Apparently this worked well  
>enough for the practice to be used during the rest of the war.

I recently read a book titled A Race on the Edge of Time which follows the development and use of radar during WW II. The author relates how airborne radar units had a significant impact on the Battle of the Atlantic because surfaced German subs were almost impossible to spot visually at night. While the radar units of the time were not sufficient to guide a torpedo/bombing run against the sub, it was sufficient to get the patrol aircraft in position to use a high-power searchlight.

To counter this, the Germans developed a RWR (radar warning receiver) and could get under water in less than a minute. To counter this, the Allies changed bands, moving to a higher frequency. This allowed them to start catching subs on the surface again. The Allies successfully spread the story of a new piece of equipment that detected the RWR local oscillator. Since submariners are a paranoid lot (their only real defense is the ability to hide), the commander for the Nazi sub fleet immediately had use of the RWRs halted. Since the super-hi-tech solution appealed to the Germans, they believed the local oscillators were at fault. (This deception was aided by a patrol aircraft crewmember who was captured by the Germans.)

Don't know if this story is more or less accurate than yours, but it is a different twist.

Chris McCormack / n0oqt  
chrismc@eecs.umich.edu

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Date: Mon, 5 Sep 1994 21:07:14 GMT  
From: netcomsv!netcom.com!joe@decwrl.dec.com  
Subject: Pocket SW Receiver Design  
To: ham-homebrew@ucsd.edu

Another super trick to get AM from an FM chip is to use an IF amp (MC1350 or equiv) whose input is connected before the limiter and SUM the output at the discriminator input (remove the disc coil).

Voila! Synchronous AM Detection!!

Works with many FM chips...

--Joe Jesson

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Joseph Jesson   joe@netcom.com   Day (312) 856-3645   Eve (708) 356-6817  
21414 W. Honey Lane, Lake Villa, IL, 60046  
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Date: Mon, 5 Sep 1994 05:02:56 GMT  
From: netcomsv!netcom.com!herbr@decwrl.dec.com  
Subject: RFI Free PC Computer Cabinet?  
To: ham-homebrew@ucsd.edu

Subject: RFI Free PC Computer Cabinet?  
Newsgroups: rec.radio.amateur.equipment  
Organization: NETCOM On-line Communication Services (408 261-4700 guest)  
Summary:  
Keywords:

Over the past several years, I have tried several different PC compatible computers in the shack in an attempt to use with my HF Station. It seems no matter with PC I have tried, and having tried toroid chokes, ac filters, etc. my PC (now a 486 /66) still QRM's the heck out of the ham hams with birdies and other annoying noise.

I know my PC is not a Class B machine, just a clone. But over the years, I have had several clones, real IBM's, Compaqs, and AST's all with basically the same result.

Does anyone out there know of a manufacturer of a PC tower or desktop cabinet that has excellent RFI suppression and shielding? If so,

would be very interested in finding this out.

Short of spending magabuck for a new class b machine, is there any other solution? My pc and my hf station are totally useless together. What does all you guys do?

Thanks.

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herbr@netcom.com

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Date: 3 Sep 1994 03:43:49 GMT  
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!overload.lbl.gov!news.kreonet.re.kr!  
hpdol.kaeri.re.kr!hppfs01!hsyim@network.ucsd.edu  
Subject: TS-450S CB Operating  
To: ham-homebrew@ucsd.edu

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Date: 5 Sep 1994 23:00:06 -0400  
From: newstf01.cr1.aol.com!search01.news.aol.com!not-for-mail@uunet.uu.net  
Subject: Unitrode 1N5767 PIN diode + TR switch design  
To: ham-homebrew@ucsd.edu

In article <1994Sep2.224445.27312@integrity.uucp>, bruces@mpd.tandem.com  
(Bruce Sawtelle) writes:

>I'm planning to replace the realy on the Ramsey 2M amp (kit) with a  
> PIN diode circuit and am looking for some info. In the ARRL  
Handbook,  
> there's an HF TR switch using a Unitrode 1N5767 that's supposed to  
> handle 100W according to the text.

Why cross the Unitrode part? Microsemi bought that Unitrode division and  
I beleive they still make the part. O&M Sales is the Texas Rep for  
Microsemi.

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Date: Mon, 5 Sep 1994 16:13:15 GMT  
From: netcomsv!netcom.com!starin@decwrl.dec.com  
Subject: WANTED:radio plans  
To: ham-homebrew@ucsd.edu

I am looking for plans to do the following:

- 1) Convert a standard car radio so it can receive transmissions in the  
460Mhz range of the radio spectrum, and;
- 2) Construction plans to build a miniature receiver capable of receiving  
transmissions in the smae range of the radio spectrum. I understand for  
this I may need to use crystals, and that's okay.

Any help or pointers on where I can find such information would be greatly appreciated.

Thanks.

Jeffrey  
{New York}

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Jeffrey  
{New York}

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Date: Mon, 5 Sep 1994 22:57:36 +0000  
From: news.sprintlink.net!demon!arkas.demon.co.uk!Michael@uunet.uu.net  
To: ham-homebrew@ucsd.edu

References <CvBDI2.Lp2@ncifcrf.gov>, <34075f\$6sl@canopus.cc.umanitoba.ca>,  
<341obn\$1sqk@info2.rus.uni-stuttgart.de>c  
Reply-To : Michael@arkas.demon.co.uk  
Subject : Re: Portable EME Station -- Questions

In article <341obn\$1sqk@info2.rus.uni-stuttgart.de>  
deap1032@servus11.rus.uni-stuttgart.de "Bruegemann" writes:

[snip]  
> There is an excellent publication "technical notes for EME communication"  
> by the Crawford Hill VHF Club.  
> Address: Dick Turrin  
> P.O. Box 65  
> Colts Neck, New Jersey  
> 07722

I'd like to get a copy of this, but I have no idea of availability, price, size of SASE to send, shipping / mailing costs, etc.

Can anyone assist? An email address, daytime phone no., or an "anytime" fax no., for Dick Turrin, or anyone else in the group, would be great.

TIA & 73's

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Mike Dower  
GOVEY  
VK2ENG

'Quoth the raven, "Never more".' ... Poe

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Date: Sun, 4 Sep 1994 17:54:42 +0000

From: news.sprintlink.net!demon!djwhome.demon.co.uk!david@uunet.uu.net

To: ham-homebrew@ucsd.edu

References <777704714snx@djwhome.demon.co.uk>,

<33vas4INN11j4@ilx018.iil.intel.com>, <33vjnq\$6i7@chnews.intel.com>s

Subject : Re: DSP on a SoundBlaster (was: FFTMORSE)

In article <33vjnq\$6i7@chnews.intel.com> Cecil\_A\_Moore@ccm.ch.intel.com writes:  
>

>Hi Doug, I don't think David means the PC can't do the filtering. I have

No. The problem is that the 8 bit SB cards cannot do simultaneous input and output. By not being able to do real time processing, I meant that you could read a signal in, process it and output it, but couldn't output it as you were reading in.

--

David Woolley, London, England

david@djwhome.demon.co.uk

Demon supplies me with IP/SMTP/NNTP. \*.demon hosts are independently managed.

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End of Ham-Homebrew Digest V94 #265

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